

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yuki SASAKI et al.

Group Art Unit: 1618

Application No.: 10/731,031

Examiner: J. ROGERS

Filed: December 10, 2003

Docket No.: 118048

For: RESIN POWDER FOR COSMETIC AND COSMETIC USING THE SAME

DECLARATION UNDER 37 C.F.R. §1.132

I, Yuki Sasaki, a citizen of Japan, hereby declare and state:

1. I have a bachelor of science degree in chemistry which was conferred upon me by Hiroshima University, Faculty of Science, Department of Chemistry, in Higashi-Hiroshima, Japan in 1994.

2. I have been employed by Fuji Xerox Co., Ltd. since April 1994, and I have had a total of five years of work and research experience in research and development of resin powder.

3. I am a named inventor in the above-captioned patent application. I am familiar with the patent application.

4. I have a professional relationship with the Assignee, Fuji Xerox Co., Ltd., of the above-identified patent application. In the course of that professional relationship, I received compensation directly from Fuji Xerox Co., Ltd. for my work relating to research and development of resin powder.

5. I and/or those under my direct supervision and control have conducted the following tests: Comparative Experiment; Evaluation 1; and Evaluation 2.

The experiment and evaluations were conducted to obtain results and evidence illustrating and supporting the patentability of the claimed subject matter of the present application. More specifically, the Comparative Experiment illustrates that resin powders manufactured according to the teachings of references cited by the Patent Office fail to satisfy the claimed limitations with respect to projected particle dimensions for the resin powders. Evaluations 1 and 2 provide results illustrating that panelists experienced unexpected results from skin applications of the claimed resin powder.

Comparative Experiment

Comparative resin powders A, B, and C were prepared in accordance with Example 1 described in U.S. Patent Application Publication No. 2003/0044370 to Sasaki et al. (hereinafter "Sasaki '370"), Manufacture Example 1 described in U.S. Patent No. 6,893,649 to Sasaki et al. (hereinafter "Sasaki '649"), and Example 1 described in U.S. Patent No. 7,005,480 to Kinsho et al., respectively. The comparative resin powders A and B were prepared in the same manner as Preparation Example 1 described in the present application, except that a reshaping treatment was not conducted in preparing these comparative powders. The reshaping treatment was also not conducted in preparation of the comparative resin powder C.

The particle property data of the comparative resin powders A, B, and C were obtained and measured in the same manner as particle property data for the Preparation Example 1 in the present application. The results of the particle property data for the comparative resin powders A, B, and C are set forth below in Table 1.

Table 1

	Resin Powder A	Resin Powder B	Resin Powder C
Degree of hydrophobicity	30	30	No data
Methanol concentration 1 (%)	20	20	No data
Methanol concentration 2 (%)	40	40	No data
Shape factor SFI	112	115	102
b/a	1.0	1.0	1.0
c/b	1.0	1.0	1.0
Average volume particle size (μm)	6.5	6.4	120
Tg ($^{\circ}\text{C}$)	68	68	No data
Surfaceness index	1.35	1.36	No data

wherein a is a major axis of each particle;
b is a minor axis of each particle; and
c is a thickness of each particle.

As shown in Table 1, the comparative resin powders A, B, and C of Sasaki '370, Sasaki '649 and Kinsho et al., respectively, do not satisfy the requirements of the claimed projected particle dimension limitations, namely the requirements that $0.5 < b/a < 1$ and $0.4 < c/b < 0.8$.

Evaluation 1

Solid powder foundations of Comparative Examples A, B, and C were prepared in the same manner described in Example 1 of the present application, except that resin powders A, B, and C, respectively, were used in place of the resin powder of Preparation Example 1.

Example 1, Example 2 and Comparative Example 1 are as described in the present application. That is, Example 1 is a solid powder foundation of the resin powder of Preparation Example 1 obtained by the claimed method including a reshaping treatment. Example 2 is a solid powder foundation of a resin powder of Preparation Example 2 obtained by the claimed method including a reshaping treatment. Comparative Example 1 is a solid

powder foundation of a resin powder of Preparation Example 3 obtained by a method excluding a reshaping treatment, similar to resin powders taught in Sasaki '370 and Sasaki '649.

The solid foundations of the Comparative Examples A, B, and C, the Examples 1 and 2, and the Comparative Example 1 were applied to the skin of twenty (20) panelists, including both males and females. A hiding power of the solid foundation with respect to skin contour and dullness or blemish of the skin were evaluated by the panelists according to criteria as follows: Very good (5); Good (4); Moderate (3); Bad (2); and Very bad (1).

The results of Evaluation 1 are set forth in Table 2. The numerical values in Table 2 are an average value of the evaluations by the 20 panelists.

Table 2

	Example 1	Example 2	Comparative Example 1	Comparative Example A	Comparative Example B	Comparative Example C
Resin Powder	Preparation Example 1	Preparation Example 2	Preparation Example 3	Resin Powder A	Resin Powder B	Resin Powder C
Hiding power	4.8	4.6	2.6	2.7	2.7	1.2

Evaluation 2

Face paints of Comparative Examples D, E, and F were prepared in the same manner described in Example 5 of the present application, except that resin powders A, B, and C, respectively, were used in place of the resin powder of Preparation Example 1.

Example 5, Example 6 and Comparative Example 11 are as described in the present application. That is, Example 5 is a solid powder foundation of the resin powder of Preparation Example 1 obtained by the claimed method including the reshaping treatment. Example 6 is a solid powder foundation of a resin powder Preparation Example 2 obtained by the claimed method including the reshaping treatment. Comparative Example 11 is a solid

powder foundation of a resin powder of Preparation Example 3 obtained by a method excluding a reshaping treatment.

The face paints of the Comparative Examples D, E, and F, the Examples 5 and 6, and the Comparative Example 11 were also applied to the skin of each of the panelists. A hiding power of the face paints with respect to skin contour and dullness or blemish of the skin were evaluated by the panelists according to the above-identified criteria.

The results of Evaluation 2 are set forth in Table 3. The numerical values in Table 3 are an average value of the evaluation by each of the 20 panelists.

Table 3

	Example 5	Example 6	Comparative Example 11	Comparative Example D	Comparative Example E	Comparative Example F
Resin Powder	Preparation Example 1	Preparation Example 2	Preparation Example 3	Resin Powder A	Resin Powder B	Resin Powder C
Hiding power	4.3	4.0	2.0	2.1	2.0	1.0

In Tables 2 and 3, the results of Evaluations 1 and 2, respectively, illustrate that a cosmetic using powder subjected to a reshaping treatment has an unexpected superior result regarding hiding skin contour. By subjecting resin particles to a physical reshaping treatment, the particles are not uniform and have a variation in shape. Particles having this variation in shape are believed to diffuse light on the skin in various directions so as to hide skin contour and dullness or blemish of the skin.

6. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and/or imprisonment under Section 1001 of Title 18

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of the United States Code, and that such willful false statements may jeopardize the validity
of the application or any patent issuing therefrom.

Date 2006/12/13Yuki Sasaki
Yuki Sasaki